

THAT WHICH IS CLAIMED IS:

1. A modular free space optical (FSO) communications device comprising:
 - an optical relay (OR) module comprising an OR housing and at least one OR device carried thereby;
 - a base module comprising a base housing and at least one positioner carried thereby for providing relative movement between said base module and said OR module for optical beam aiming;
 - a camera; and
 - a remote station interface connected to said at least one positioner for permitting remote optical beam aiming, said remote station also connected to said camera for permitting remote viewing.
2. The modular FSO communications device of Claim 1 wherein said remote station interface comprises an optical fiber interface.
3. The modular FSO communications device of Claim 1 wherein said remote station interface comprises an Internet remote station interface.
4. The modular FSO communications device of Claim 1 further comprising at least one camera positioner for permitting remote control of said camera.
5. The modular FSO communications device of Claim 1 wherein said base module further comprises a

controller connected between said remote station interface and said at least one positioner.

6. The modular FSO communications device of Claim 1 wherein said at least one OR device comprises a fixed telescopic lens device.

7. The modular FSO communications device of Claim 6 wherein said OR housing has an aperture therein; and further comprising a steering mirror in the optical path between the aperture and said fixed telescopic lens device.

8. The modular FSO communications device of Claim 1 further comprising an adaptive optics module connected between said base module and said OR module.

9. A modular free space optical (FSO) communications device comprising:

- an optical relay (OR) module comprising an OR housing and at least one OR device carried thereby;
- a base module comprising a base housing and at least one positioner carried thereby for providing relative movement between said base module and said OR module for optical beam aiming;
- a camera; and
- a remote station interface connected to said camera for permitting remote viewing.

10. The modular FSO communications device of Claim 9 wherein said remote station interface comprises an optical fiber interface.

11. The modular FSO communications device of Claim 9 wherein said remote station interface comprises an Internet remote station interface.

12. The modular FSO communications device of Claim 9 further comprising at least one camera positioner for permitting remote control of said camera.

13. The modular FSO communications device of Claim 9 wherein said base module further comprises a controller connected between said remote station interface and said at least one positioner.

14. The modular FSO communications device of Claim 9 wherein said at least one OR device comprises a fixed telescopic lens device.

15. The modular FSO communications device of Claim 14 wherein said OR housing has an aperture therein; and further comprising a steering mirror in the optical path between the aperture and said fixed telescopic lens device.

16. The modular FSO communications device of Claim 9 further comprising an adaptive optics module connected between said base module and said OR module.

17. A free space optical (FSO) communications system comprising:

first and second modular FSO communications devices aligned for optical communication therebetween, each comprising

an optical relay (OR) module comprising an OR housing and at least one OR device carried thereby,

a base module comprising a base housing and at least one positioner carried thereby for providing relative movement between said base module and said OR module for optical beam aiming,

a camera, and

a remote station interface connected to said at least one positioner for permitting remote optical beam aiming, said remote station also connected to said camera for permitting remote viewing.

18. The FSO communications system of Claim 17 further comprising a remote terminal connected to said remote station interfaces of said first and second modular FSO devices.

19. The FSO communications system of Claim 17 wherein said remote station interface comprises an optical fiber interface.

20. The FSO communications system of Claim 17 wherein said remote station interface comprises an Internet remote station interface.

21. The FSO communications system of Claim 17 wherein each of said first and second modular FSO communications devices further comprise at least one camera positioner for permitting remote control of said camera.

22. The FSO communications system of Claim 17 wherein said base module further comprises a controller connected between said remote station interface and said at least one positioner.

23. The FSO communications system of Claim 17 wherein said at least one OR device comprises a fixed telescopic lens device.

24. The FSO communications system of Claim 23 wherein said OR housing has an aperture therein; and wherein each of said first and second modular FSO communications devices further comprises a steering mirror in the optical path between the aperture and said fixed telescopic lens device.

25. The FSO communications system of Claim 17 wherein each of said first and second modular FSO communications devices further comprises an adaptive optics module connected between said base module and said OR module.

26. A free space optical (FSO) communications system comprising:

first and second modular FSO communications devices aligned for optical communication therebetween, each comprising

an optical relay (OR) module comprising an OR housing and at least one OR device carried thereby,

a base module comprising a base housing and at least one positioner carried thereby for providing relative movement between said base module and said OR module for optical beam aiming,

a camera, and

a remote station interface connected to said camera for permitting remote viewing.

27. The FSO communications system of Claim 26 further comprising a remote terminal connected to said remote station interfaces of said first and second modular FSO devices.

28. The FSO communications system of Claim 26 wherein said remote station interface comprises an optical fiber interface.

29. The FSO communications system of Claim 26 wherein said remote station interface comprises an Internet remote station interface.

30. The FSO communications system of Claim 26 wherein each of said first and second modular FSO communications devices further comprise at least one camera positioner for permitting remote control of said camera.

31. The FSO communications system of Claim 26 wherein said base module further comprises a controller connected between said remote station interface and said at least one positioner.

32. The FSO communications system of Claim 26 wherein said at least one OR device comprises a fixed telescopic lens device.

33. The FSO communications system of Claim 32 wherein said OR housing has an aperture therein; and wherein each of said first and second modular FSO communications devices further comprises a steering mirror in the optical path between the aperture and said fixed telescopic lens device.

34. The FSO communications system of Claim 26 wherein each of said first and second modular FSO communications devices further comprises an adaptive optics module connected between said base module and said OR module.

35. A free space optical communications method comprising:

providing a modular free space optical (FSO) communications device comprising an optical relay (OR) module comprising an OR housing and at least one OR device carried thereby, a base module comprising a base housing and at least one positioner carried thereby for providing relative movement between the base module and the OR module for optical beam aiming, and a camera connected to the remote station interface; and

interfacing the camera with a remote station for permitting remote viewing.

36. The method of Claim 35 further comprising interfacing the at least one positioner with the remote station for permitting remote optical beam aiming.

37. The method of Claim 35 wherein interfacing comprises interfacing using an optical fiber interface.

38. The method of Claim 35 wherein interfacing comprises interfacing via the Internet.

39. The method of Claim 35 wherein the modular FSO communications device further comprises at least one camera positioner for permitting remote control of the camera by the remote station.

40. The method of Claim 35 wherein the at least one OR device comprises a fixed telescopic lens device.

41. The method of Claim 35 wherein the modular FSO communications device further comprises an adaptive optics module connected between the base module and the OR module.